Kyoto University
Economic Review

Memoirs of
The Department of Economics
in
The Imperial University of Kyōto

Volume XVIII
1943

Published by the Department
of Economics in
The Imperial University of Kyoto
THE PROBLEM OF AGRICULTURAL LABOUR-POWER IN THE SOUTH

By YOSHINOSUKE YAGI

1.

I have pointed out elsewhere the existence of two markedly different, and opposed forms of agricultural enterprises in the southern tropical region which forms a part of the Great East Asia Co-prosperity Sphere, namely the plantation or estate and the native farming, and explained their respective characters. The plantation is the typical form of enterprise which has existed for several hundred years for the industrial exploitation of the tropics. In this enterprise, the enterprisers combine the business technique and capital of their own countries with the labour-power of the natives and have been engaged in the production of vegetable raw materials. Now, it is necessary to make needed improvements on this system of production, in order to acquire war materials and other necessities, and also to restrict the movement of the natives engaged in the plantation within a minimum area and to stabilize their living.
However, it is urgent to revise the objectives and principles of management for the plantations so as to make them conform to the ideas of the Great East Asia Co-prosperity Sphere.

In other words, (1) the former objective of private profit-making adopted by the European-style plantations should be replaced by the principle of public interest first and with the proper rates of interests. Secondly, whereas formerly, the farm products were selected by the enterprisers from the standpoint of profit-making, plans should be made for the cultivation of particular products suited for particular localities with the broad object of self-sufficiency in the Great East Asia sphere. Thirdly, for the first time, at least, the object of executing the present war should necessitate the curtailment in the production of excessive agricultural resources and the restriction of the production of unnecessary products such as aromatics and spices. The cultivation of products which are deficient in the Co-prosperity Sphere (cotton for instance) should be encouraged. The management of the plantations should be dictated by such demands of the State.

Thus, since the planned production of material goods should be carried on within the Great East Asia Co-prosperity Sphere, with a view to realizing economic self-sufficiency, it is anticipated that the area of the plantations in the southern tropical region will be somewhat reduced for the time being. Since only localities suited for plantations would remain under cultivation, their management is bound to find a great surplus of workers. However, there will be the necessity of making some of the agricultural laborers formerly employed by the plantations to take up native farming or to become miners. These are problems for future consideration.

In this article, I propose to take up tropical agriculture in the south, especially the labour-power of the plantations, and to examine the various measures which have been proposed hitherto for the solution of this problem, in order
that I may contribute to the establishment of an agricultural policy for the Great East Asia sphere.

2.

Those engaged in tropical agriculture in the south may be divided into high-grade technicians and wage workers. The former have the role of technically directing the management of plantations on a large scale, while the latter are engaged in agricultural labour under the direction and supervision of the former. There are some differences in the personnel organization of different plantations, but the following table indicates the typical personal organization of sugar plantations in Java.

```
Directeur
  Administrateur
    Kantoor
      1ste Boekhouder
      2de Boekhouder
      Landbouw
        1ste Employé
        2de Employé
        Afdeeling
          Mandoer
            Toekang
          Toekarig
            Kapala Kampong Hoofd Mandoer
            Harian Mandoer
            Schrijver
            Koelie
          Mandoer
            Assistent
            Schriwer
            Keel, E Hulp Mandoer
            Machinist
            Chemiker
            Fabriek
```

The director (directeur), given in the above table, establishes the supreme policy of management for plantations and is in charge of the work of finance and sale of farm products for the plantations. Under this supreme policy, the administrator (administrateur) is in charge of the following work: outside negotiations, general supervision over the entire plantation, the making of budget and financial settle-
ments, and the planning of farming operations. The superintendent (1st Employe) manages the farm operations according to the plans made by the administrator. Several farm districts (Afdeeling) are established and each of them has its district chief, who with the help of his assistant (assistent) directs coolies and is in charge of the actual work of cultivation.

Among those who are in charge of the actual cultivation of farm products, the Hoofd mandoer is the head of coolies numbering from one to several hundreds and supervises contract work. A Hulp mandoer assists him. The Harian mandoer is the head of coolies who are employed by the hour. He is usually at the head of from ten to twenty such coolies and works under the direction of the chief of a farm district. There are from several to scores of Harian mandoers in each farm district. The Toekang is different from usual coolies and has special technical knowledge. He is either a machinist, or carpenter and grafter and belongs directly to the assistant of the farm district or the factory machinist. The Kapala kampong supervises the coolie quarters established within the plantation compound. The Schrijver is the clerk who makes the records of the employment of coolies within the plantation.

In the Western plantation having such a personnel organization as given above, the Westerners have the work of playing the role of the directors, administrators, engineers or superintendents, and direct the natives and imported coolies. The number of coolies employed in each plantation in the case of Java is about 800 while that in Sumatra and Borneo is about 350. The number of coolies required varies for different products. For example, in the case of tobacco cultivation which is carried on most intensively, the number of coolies required per hectare is 143. In other cases, the numbers are as follows: 112 for coffee cultivation; 65 for rubber cultivation; 50 for oil coconut cultivation; 50 for coffee cultivation; 48 for cacao cultivation; 40 for chinna cultivation; 15 for sisal cultivation.
The reason why the tropical plantation requires a comparatively large number of coolies is found in the fact that the use of machinery is restricted to the process of preparing farm products; and there is very little room for its use in the cultivation and administration of plantations. For instance, there is no room for the use of machinery in such work as the sapping of rubber trees, picking of tea and tobacco leaves, all of which are done by human hands. Another reason for the use of a comparatively large number of coolies in tropical farming is that, unlike farming in the temperate zone, there is no period of idleness for farmers in the tropical zone. Moreover, tropical farming requires such special work as making shade against the burning tropical sunshine, prevention of destructive work by winds, eradicating weeds and prevention of injuries by insects and germs. Thus, the plantations have two serious problems to solve: how to get the required number of coolies and how to let the coolies hired engage in labour regularly and punctually. As to the necessity of labour-power for the plantation, it is said that of the various factors determining the plantation as an entity, the securing of human labour-power is by far the most important.

3.

Since the plantation as an intensive industry requires a large number of labourers, it is necessary that it should be situated near a district which is densely populated by natives. On the other hand, the plantation as large scale farming, requires a vast area of land, and such an area is usually found in sparsely populated districts. Thus, we have to harmonize these seemingly two opposing demands. Now, while land is fixed, labour is mobile, and for this reason, in a district where native labour-power is scarce, labour-power must be imported from other territories or countries. It is because of this necessity that it is said that the plantation district turns into the tropical labour migration dist-
We shall now take up the subject of native labourers. In the tropical region which is densely populated by natives, the plantations established therein employ natives as their labourers. Now, in the case of most native tribes, their sense of economy is in the stage of infancy, where there exists the domestic economy only in which the inhabitants can easily secure food and other daily necessities by their own hands in sufficient amounts for their requirements. Favoured by benign temperature, being able to securing wild vegetables all the year round, and because of their incredible lack of wants, they can maintain their subsistence by their minimum work. Because of this circumstance combined with the absence of ambition on the part of the natives, it is extremely difficult to induce them to become hired labourers in plantations. Regarding this, it is said that the natives's idea of happiness lies in the limitation of labour. Thus the labour needed for purposes other than the maintenance of subsistence is regarded by them as useless.

Moreover, since the natives of the tropical region are characterized by indolence, ignorance and conservatism, they are unsuited for agricultural labourers unless they are given proper guidance and discipline. Even if they had to work hard in their own territory for a living, they would zealously avoid labour, and would not do any work today that they could postpone to to-morrow. They have inherited the work their ancestors bequeathed them and will carry it on in its unmodified form, wishing no progress at all. Because of their conservatism they adhere to their traditional customs, possess a deep craving for their birth place, and for this reason do not wish to migrate to any other place even if they could make much headway in their living. Furthermore, they always have a prejudice against anything new.

The lack of wants on the part of the natives, or their negative attitude towards economic advancement, often gives rise to their low labour consciousness. As the living in the
tropical region is very easy and only a scanty living expense is sufficient, the natives work only to secure this small living cost and do not wish to do any further work.

Moreover, in the case of native farmers who are self-sufficient in their living, they do not wish to become wage earners because they can continue their self-sufficient living, unless they receive the impetus of earning money. On this point, Pelzer says: “Labourers can be found in the tropical region today only when natives are unable to satisfy their necessary living demands with their present revenue and under their economic conditions. Such a circumstance arises, for example, when all available arable lands have been occupied because of the large increase of population. Thus, in such a case there will be a group of proletarians, who, having no land in possession, must work as wage-labourers.” The natives will become wage workers and go to other places to work, if there be a prospect of earning a greater income. Therefore, we face the question of how to make them engage in work in the case of the large population of natives.

The first measure adopted for assisting them to form the habit of working regularly and punctually is to make them pay taxes in cash money. In this method, the pole tax or the house tax is levied on the condition of their payment in cash money, thereby forcing the natives to make up their minds to work in order to secure the money for the payment of taxes. This method makes them realize the value of labour and leads and guides them to form the habit of engaging in labour regularly.

The second method of inducing the natives to engage in work is the policy of economic inducement. By this method, the natives are led to engage in work as it offers them better conditions than in their own native place by expanding their consciousness of wants and by making their demands more flexible than before. By this method,

the wants of the natives are given an impetus and they are led to secure monetary wages on their own initiative in order to satisfy their new wants. Thus, this method is based on the supposition that the wants and demands of the natives will be aroused towards the improvement of their living conditions, or in the direction of the advancement and progress in their material and spiritual conditions of living.

Another method of making the natives engage in labour is to confiscate the land which is the base of their economic life and thereby coerce them to work because of their necessity to make a living. This method was put into practice in Algeria and Congo. It should not be adopted because it will result in the extermination of the peasantry, the middle class of the native tribes, and will increase the number of lower class labourers. The commandeering of native labour-power or coercing the natives directly to work may be thought of as another method. But except the case of commandeering the natives for public purposes, such a method is not plausible. To give a private plantation company such drastic power of securing labour should not be proper even in times of peace.

We have seen several methods of making the natives engage in work regularly and punctually, including the method of tax payment in cash money. But it is highly desirable to educate the natives so that they will come to appreciate the sacredness of labour and the necessity of labour for the social life and industrial development of the State and come to possess the beautiful habit of working regularly.

In a territory like Java which is densely populated, it is possible for its plantations to secure hired labourers from the near-by villages. Moreover, it is impossible for the natives there to make an easy living only by cultivating their arable land, because of the small area of territory and excessive population; but they have an opportunity of earning money to make up deficits in their living expenses by working in the plantations. Plantations labourers in Java
are of the following two kinds: those who come to the plantation daily from their own villages during the period of farm idleness and those who live in the dwelling houses established for them by the plantations within their compound. Both classes are free labourers as against contract labourers.

Payment to the workers of the plantations are made in one of the following two ways: day wages and piece work payment. The system of day wages is adopted when the work to be done should be effected quickly even at the expenses of its crudeness. Thus, the piece work system is adopted in such work as the picking of tea leaves, cropping of the century plant, and the sapping of the rubber trees. In Java, this system is preferred by the plantation enterprisers, because of their desire to save not only the wages paid but also the expenses of labour supervision. In the plantations in Java, the labour expenses constitute from 50 to 60 per cent of the total expenses and for this reason the saving of labour expenses is regarded with utmost importance.

4.

The method of securing labour-power in the southern tropics which is sparsely populated is to import labourers from other regions. Those territories which can supply the southern tropics with labour-power must have several qualifications. In the first place, they should be densely populated. Secondly, they must be deficient in the possession of land. Thirdly, their inhabitants should have the difficulty of living and in consequence they must send out a part of them to other countries. Lastly, they should be capable of tropical labour. The territories possessing such qualifications are the following: South China, India (the province of Madras in particular) and Java (including Mazra).

(1) South China (Fukien and Kwantung). South China has been suffering from both excessive population and
political unrest. Especially, the provinces of Fukien and Kwantung, both of which facing the Pacific, have sent many of their inhabitants to the southern region. The Chinese from these provinces are adept in economic matters, their living standard is low and they are qualified as immigrants to the tropical region. The fact that they have economic interest and no disposition for political ambitions truly befits them for success in the southern region. Many of the Chinese in the South Seas are engaged in commercial activities, but not a small number of them are also employed as coolies in the plantations and mines in the tropics.

(2) India (the province of Madras in particular). The importation of English manufactures had the effect of crushing the handicraft industry of India and brought about excessive population in agricultural villages. Moreover, the British encouragement of the cultivation of cotton in place of rice destroyed the Indian life of economic self-sufficiency. The heavy burden of taxes, exploitation by oppressive money lenders and repeated bad crops impoverished the farmers and divorced them from their land, thereby increasing the number of tenants and farm hands. Thus, the poor tenants and farm hands attempted to migrate to other countries as agricultural labourers in order to get better wages. Many Tamilians went out of their province of Madras in order to work as agricultural coolies. Although they are inferior to other peoples in point of efficiency, they are more suited to plantation work racially than are Chinese. And it is said that the object of their emigration is to save money and then go back to their home country in order to buy land and live comfortably there during the remainder of their lives. The plantations on which the Indian coolies could work after 1916 were the following districts: (1) West Gatts in South India (2) Bengal and Assam in North India (3) Ceylon and (4) Malay Peninsula.

(3) Java (including Mazra). The third region that can supply the tropical plantations with labour-power is Java. Its area is 132,274 kilometers and its population is 40,889,
500. Its population density is 314.5 persons per square kilometers. The population density in Central Java is higher than those in the western and eastern parts of the country. Java's population in 1800 was roughly 4,000,000 and it increased ten times during the subsequent 130 years. Its population density per square kilometer also increased as follows: 94 persons in 1860, 149 persons in 1880, 216 persons in 1900; 262 persons in 1920 and 314 persons in 1930. Since no big industries developed in Java during the period transpired, agricultural population inevitably became excessive, with the drastic reduction of land area per farmer. The Government of the Netherlands East Indies had to cope with this situation. It attempted to elevate the intensity of rice cultivation by improving farming, especially the irrigation system, and at the same time encouraged the cultivation of such farm products as tobacco, coffee, copra, Indian corn and cassava, all of which could be advantageously exported. The government also tried to send the Javanese to sparsely populated regions such as Sumatra and Borneo. This latter attempt failed to succeed because of the craving of the people for their birth place and the opportunity offered to them by the plantations in Java to work as wage workers. However, this policy of encouraging emigration partly succeeded. In 1927, those who went to other countries numbered 67,510, the number increasing to 29,350 in 1930 and much less in later years.

Coolies from the foregoing three regions were chiefly absorbed by the Philippines, Malay Peninsula and East Indies. In the Philippines, many Chinese are engaged in the commercial transactions of farm products. In Malay Peninsula, the Chinese coolies work in tin mines. Indians lead the coolies working in rubber plantations, followed by Chinese and Javanese. In the plantations of Sumatra and Borneo, the Javanese and Chinese coolies make up the deficiency in the labour supply of the natives. The number of the Javanese and Chinese engaged in the cultivation of tobacco on the Eastern Coast of Sumatra in 1931 were 6,209
and 18,990, respectively. I shall now touch on the problems of immigration labour in the plantations of the Eastern Coast of Sumatra.

The plantations in Sumatra had to depend on foreign labour, because it is sparsely populated and the natives most of whom live on the highland on the western part of the country did not wish to work as wage workers. At first, the Chinese composed the major portion of foreign labour and worked in the tobacco plantation which was then the only plantation in the island. Then, rubber and other plantations were established and the demand for labour so rapidly increased that the Chinese were no longer sufficient. Accordingly, the Javanese coolies were imported. The Javanese coolies are engaged in the work that does not require the carefulness which is required of tobacco cultivation. Of the total foreign contract labourers numbering 196,708 in the East Coast of Sumatra at the end of 1925, the following are their percentages by races: male Javanese, 62.5 per cent, female Javanese, 23.11 per cent, Chinese (who cultivate chiefly tobacco), 13.62 per cent, and cattle raisers from India, 0.77 per cent. The percentages of the male and female Javanese are 62 and 23 per cent, respectively. Chinese coolies come as bachelors and many of them marry Javanese women.

There are three ways of getting the supply of coolies from Java: (1) commercial solicitation (2) self-solicitation and (3) free solicitation. First, those whose business is to solicit coolies in Java present the coolies they secured in Java to the plantations in other territories. With the increase in the number of coolies needed, those commercial solicitors greatly increased the rates of their commissions which they demanded per head regardless of the character of the coolies hired. Accordingly, this first method came to be replaced gradually by the second method, namely, self-solicitation on the part of the plantation enterprisers who invite coolies to come to work at their establishments. For the purpose of making this solicitation, the All Sumatra East Coast Rubber
Growers' Association and the Deli Growers' Association jointly established the Deli Joint Immigration Office at Sumaran, Java, on May 1, 1916. The third method of solicitation is used by the plantations which have an ample supply of labour-power and which wish to fill up the occasional deficits of labour supply by soliciting labour in Java. This method is very simple. Under it, those Javanese coolies of good labour record, having worked in Sumatra plantations for a period of contract labour, now returned to Java are induced to go to Sumatra again either alone or with their friends to engage in plantation work. This method has several characteristics: the moral quality of the coolies is assured on one hand and the coolies themselves enter into no labour contract with any plantation enterpriser on the East Coast of Sumatra, when departing from Java, but remain absolutely free. In the case of the first and second methods of solicitation, the coolies wishing to go to Sumatra must enter into labour contracts in Java. But in the case of the third method, the coolies are free to enter into labour contracts, when arriving at the place of the plantations, or may prefer to be sent back to Java at the expense of the plantation enterprisers.

The solicitation of coolies in China is made by the government solicitation offices located in places such as Swatow, Singapore and Penan. Then, elder coolies known as "laoke" were often sent to China by the Deli Growers' Association as its agents for the purpose of engaging Chinese coolies for plantations. But since about ten years ago, the solicitation of Chinese coolies has been stopped.

It was back in 1880 that the Coolie Act was enacted for the first time. It was later revised according to changes of time. The principal feature of this law lies in the fact that it contains legal sanction for penal confinement in the case of the wilful violation of contracts by coolies. The punishment was to be inflicted in any one of the following cases: (1) when a coolie has failed to fulfil the obligation to work during the period provided by the contract; (2)
when he has fled; (3) when he has continuously refused to work as demanded by the contract, etc. The law also provides fine for the violation of the contracts by the plantation enterprisers. From early times fierce controversies have been made regarding the legal sanction contained in the Coolie Act. The plantation enterprisers upheld the law on the ground that if the legal sanction contained is eliminated, their industry would face a grave danger. Their arguments may be stated as follows: "The Coolie Act containing legal sanction is absolutely necessary for the plantations overseas under the present circumstances—as it assures the economic exploitation and development of the region—as well as for the entire economic life of the Netherlands East Indies." On the other hand, the opponents of the Coolie Act argue that a contract system having such a legal sanction would amount to "the modern enslavement" of coolies, and as a ground for their opposition point to the fact that the abolition of legal sanction in Malay Peninsula and Assam region has caused no confusion to the plantations in these regions.

The government of the Netherlands East Indies intended to abolish gradually the Coolie Act containing legal sanction against coolies. Official Gazette No. 540 in 1911 promulgated labour contracts or re-contracts between employers and coolies, the terms of which were either one year or three years at longest, but not containing therein any legal sanction. The coolies that enter into such contracts were named as "free labourers". The Coolie Act—promulgated on June 1, 1931 provided that legal sanction attached to all labour contracts should be based on most rigid conditions. (Legal sanction was completely abolished in 1942). The same law provided the "restriction formula" by which the plantations were required to increase the number of their free labourers in different stages, in addition to the number of contract labourers employed.

There are differences in the terms of two sets of labour contracts, namely, immigration contracts and re-contracts.
The former are the labour contracts concluded outside the East Coast of Sumatra or those concluded on the coast for the first time with labourers coming from outside the same coast (the latter labourers being those employed in response to the free solicitation of the East Coast of Sumatra). The latter contracts are those which are made in all other cases. The longest period of immigration contracts is three years while that of re-contracts is thirteen months. Because of the high cost of getting the supply of labour-power, the plantation enterprisers wish to extend the periods of contracts as far as possible, so that the periods of contracts are usually the maximum periods provided by law.

As to the working hours of coolies, they work ten hours in the day time and eight hours at night. As to child labour, the employment of those below twelve years old is prohibited by law.

The wages of coolies are not the same as those prevailing in the usual labour market: they do not depend upon the law of supply and demand, but are decided by the unilateral will of the plantations or of their associations. This is because the coolies who are found in Java are scattered among large numbers of villages and for this reason they have no voice en masse in deciding wages; furthermore, they are so extremely impoverished at home that they must accept whatever terms are offered by their solicitors regarding remuneration for their labour. Thus, the wages of the coolies correspond to their minimum living expenses.

There are many who doubt that the raise of the wages of the coolies beyond their minimum living expenses would result in elevating their labour efficiency. The reason is found in the fact that the coolies in Java have no inclination to save money and are apt to spend their excess wages for gambling and amusements, with the reduction of labour efficiency as a result. Once a certain plantation in Java employing free coolies raised the rates of piece work in order to elevate their labour efficiency and to increase the amount of labour supply. Contrary to the expectations of
the plantation-officials, the coolies became irregular in their daily turn-out and the number of their working-hours decreased. This may be taken as an example. We often hear of the laziness of labourers in the tropics, that whenever they are paid more than they need actually for their daily living, they remain idle so long as they can live on the excess income, instead of working at all.

In view of what is given above, it is not advisable from the standpoint of social political policy to raise the wages of coolies at once even when they are to be given protection. In such a case, their excess wages-should be set aside for welfare and educational purposes such as sanitation, hygiene, medical disposition, schools, moving picture halls, and other wholesome amusements, or old-age pensions. Such a measure is more effective in helping the coolies. Moreover, the old age pensions should be given to them not in a lump sum but in monthly installments.

Coolies' payments for their labour are made in the following different items: (1) wages in cash money (2) free dwelling houses for coolies and their families (3) free medical treatment (4) the supply of rice at cheap rates. It is highly desirable that the coolies should be paid with the above items well combined. According to the investigation made by the Permanent Labour Commission, the daily wage of a single bachelor coolie in 1924 was as follows: 51 cents, regular wage; 2 cents for rice subsidy; 5 cents for free dwelling house; 5 cents for medical expenses; the total, 63 cents.

The wages of coolies are mostly calculated according to the number of days worked. However, very often "the day-wage system that permits of the flexibility of working hours" is adopted, its object being to increase the efficiency of coolies. Under this system, the amount of labour to be done per day for a fixed daily wage is determined for each coolie by the plantation. Thus, in this case both wage and the amount of labour per day are constant, but the working hour is variable. In other words, the number of working
hours will be reduced if one should work hard. Under this system, coolies will work in earnest even without the supervision of overseers. After finishing their daily work they can go back to their homes and are satisfied. This system is convenient for both the employers and the workers. Moreover, it is considered to be in harmony with the psychology of the Javanese coolies.

Such a wage system is adopted in the case of the usual cultivation labour in the plantations, but in the case of crop labour, the piece work system is adopted and experienced coolies are paid according to the amount of work they have done. The latter system is adopted in the picking of tea and of the century plant and in the sapping of the rubber trees.

A special wage system is adopted in the case of the Chinese field coolies employed in the tobacco plantations of Deli. Each coolie is entrusted with the work of one bough of tobacco fields usually containing about 16,000 tobacco stalks. He must cultivate and pick tobacco leaves and carry them to the drying place in order to complete his given work. His wage is based on the unit of 1,000 tobacco stalks and according to the nature of the tobacco raised. The rate per 1,000 stalks in 1926 was between 8.5 and 11.5 guilders.

5.

The plantations in the southern tropical region must make a re-start and development under the direction of Japan, and we should send to the region capable enterprisers, technicians as well as cooperatives and should supply it with the needed capital. We should utilize the natives as plantation labourers. As many of them are inclined to idleness, their re-education and proper guidance is necessary so that they should become accustomed to regular labour. The adoption of a suitable labour policy by our Government is also absolutely necessary.